

CLAIMS

1. An information recording and playing apparatus,
comprising a recording/playing unit to perform a background
5 formatting on a rewritable recording medium together with a
recording/playing of data on the rewritable recording medium
according to a user's request,
wherein

said information recording and playing apparatus
10 further comprises a control unit to prevent a position where
the recording/playing of data on the rewritable recording
medium is completed from being too far apart from a position
where the background formatting is to be started.

15 2. The information recording and playing apparatus
as claimed in claim 1, wherein in a case where a user makes a
request of recording/playing data, the control unit performs
the recording/playing of the data according to the request,
and wherein after the recording/playing of the data according
20 to the request is completed, the control unit prevents the
position where the recording/playing of the data is completed
from being too far apart from the position where the
background formatting is to be started.

25 3. The information recording and playing apparatus

as claimed in claim 2, wherein in a case where the user makes a request of recording/playing data while the background formatting is in process, the control unit performs the recording/playing of the data according to the request,

5 after the recording/playing of the data according to the request is completed, the control unit compares the position where the recording/playing of the data is completed with the position where the background formatting is to be started, and

10 if the positions are apart from each other by greater than a predetermined distance, the control unit suspends the background formatting so as to prevent the position where the recording/playing of the data is completed from being too far apart from the position where the
15 background formatting is to be started.

4. The information recording and playing apparatus as claimed in claim 3, wherein in a case where the user makes a request of recording/playing data while the background
20 formatting is in process, the control unit performs the recording/playing of the data according to the request and measures a time from when the recording/playing of the data according to the request is completed,

 if the measured time is over a predetermined period,
25 said control unit compares the position where the

recording/playing of the data is completed with the position where the background formatting is to be started, and

if the positions are apart from each other by greater than a predetermined distance, the control unit

5 suspends the background formatting so as to prevent the position where the recording/playing of the data is completed from being too far apart from the position where the background formatting is to be started.

10 5. The information recording and playing apparatus as claimed in claim 3, wherein the predetermined distance is variable in accordance with characteristics of the recording/playing unit and a circuit configuration of the recording/playing unit.

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6. The information recording and playing apparatus as claimed in claim 1, wherein said data are streaming data.

7. A method of recording and playing information in
20 an information recording and playing apparatus carrying out a background formatting on a rewritable recording medium together with a recording/playing of data on the rewritable recording medium according to a user's request, comprising a controlling step of preventing a position where
25 recording/playing data according to the user's request is

completed from being too far apart from a position where the background formatting is to be started.

8. The method of recording and playing information
5 as claimed in claim 7, wherein said controlling step further comprises the steps of:

performing recording/playing of the data in a case
where a user makes a request of recording/playing of the data;
and

10 preventing the position where the recording/playing
of the data according to the user's request is completed from
being too far apart from the position where the background
formatting is to be started after said recording/playing of
the data according to the user's request is completed.

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9. The method of recording and playing information
as claimed in claim 8, wherein said controlling step further
comprises the steps of:

performing the recording/playing of the data in a
20 case where the user makes a request of recording/playing data
while the background formatting is in process;

comparing the position where the recording/playing
of the data is completed with the position where the
background formatting is to be started after the
25 recording/playing of the data according to the user's request

is completed; and

suspending said background formatting so as to prevent the position where the recording/playing of the data is completed from being too far apart from the position where the background formatting is to be started if the positions are apart from each other by greater than a predetermined distance.

10. The method of recording and playing information as claimed in claim 9, wherein said controlling step further comprises the steps of:

performing the recording/playing of the data in a case where the user makes a request of recording/playing data while the background formatting is in process;

measuring a time from when the recording/playing of the data according to the request is completed;

comparing the position where the recording/playing of the data is completed with the position where the background formatting is to be started if the measured time is over a predetermined period; and

suspending said background formatting so as to prevent the position where the recording/playing of the data is completed from being too far apart from the position where the background formatting is to be started if the positions are apart from each other by greater than a predetermined

distance.

11. The method of recording and playing information
as claimed in claim 9, wherein the predetermined distance is
5 variable in accordance with characteristics of the
recording/playing unit and a circuit configuration of the
recording/playing unit.

12. The method of recording and playing information
10 as claimed in claim 7, wherein said data are streaming data.

13. A computer readable recording medium storing a
program to direct a computer to carry out a background
formatting of a rewritable recording medium together with a
15 recording/playing of data of the rewritable recording medium
according to a user's request, and carry out a controlling
step of preventing a position where recording/playing data
according to the user's request is completed from being too
far apart from a position where the background formatting is
20 to be started.

14. The computer readable recording medium as
claimed in claim 13, wherein said controlling step further
comprises the steps of:
25 performing recording/playing of the data in a case

where a user makes a request of recording/playing of the data,
and

preventing the position where the recording/playing
of the data according to the request is completed from being
5 too far apart from the position where the background
formatting is to be started after said recording/playing of
the data according to the request is completed.

15. The computer readable recording medium as
10 claimed in claim 14, wherein said controlling step further
comprises the steps of:

performing the recording/playing of the data in a
case where the user makes a request of recording/playing data
while the background formatting is in process;

15 comparing the position where the recording/playing
of the data is completed with the position where the
background formatting is to be started after the
recording/playing of the data according to the user's request
is completed; and

20 suspending said background formatting so as to
prevent the position where the recording/playing of the data
is completed from being too far apart from the position where
the background formatting is to be started if the positions
are apart from each other by greater than a predetermined
25 distance.

16. The computer readable recording medium as claimed in claim 15, wherein said controlling step further comprises the steps of:

5 performing the recording/playing of the data in a case where the user makes a request of recording/playing data while the background formatting is in process;

measuring a time from when the recording/playing of the data according to the request is completed;

10 comparing the position where the recording/playing of the data is completed with the position where the background formatting is to be started when the measured time is over a predetermined period; and

suspending said background formatting so as to
15 prevent the position where the recording/playing of the data is completed from being too far apart from the position where the background formatting is to be started when the positions are apart from each other by greater than a predetermined distance.

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17. The recording medium as claimed in claim 15, wherein the predetermined distance is variable in accordance with characteristics of the recording/playing unit and a circuit configuration of the recording/playing unit.

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18. The recording medium as claimed in claim 13,
wherein said data are streaming data.